8.2 p 338 #26-44 Answers only

26. a) heats are the same

b) temperature differences are different

27. Yes, pushes hot air down.

28. 81

29. a) black body perfect radiator e=1

b) e.g charcoal, interior of a box painted black with a viewing hole

c) 1.78 x

30. a) wavelength for the peaks are the same, so same temp

b) 0.6

31. 278 K

32. derivation

33. a) power per area

b) 2.4 W/m2

34. a) almost just given

b) radiates in all directions equally

35. a) 446 K

b) 0.48 x 10-5 m

36. a) definition

b) water content, soil colors, cloud cover

37. See text

38. a) diagram

b) 0.29

c) 100 N/m2

d) 258 K

39. derivations ends with 242 K

40. Radiation dominant

41. a) land higher albedo

b) conduction, radiation, some convection

42. higher evaporation for tropical

43. a) dry and cool

b) moist and warm

44. 2ºC